THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXVI. THURSDAY, MARCH 13, 1862. No. 6.

IRIDECTORY IN CHRONIC GLAUCOMA.

BY J. H. DIX, M.D., BOSTON.

[Communicated for the Boston Medical and Surgical Journal.]

THE following case, though not illustrative of the most brilliant successes attending the performance of iridectomy in acute and occasionally in chronic glaucoma, is still so confirmatory of the general positions advanced by Dr. Von Graefe on the subject, in his very thorough and excellent work,* that in the present paucity of actual experience of it in this country, I feel it my duty to present it, and also to avail myself of it as a preface to something which I have to say in a future number of your JOURNAL. I wish also to express to Dr. B. J. Jeffries and Dr. H. Derby, who have had the advantage of attending Dr. Von Graefe's clinique, my indebtedness for an explanation, in default of which I hesitated for some time to adopt the operation.

Jan. 20th, 1862.—Miss M. A. P., æt. 50, in December, 1860, woke up one morning with violent pain in her left eye and imperfect vision from it. For five weeks the pain continued, with photophobia and increasing dimness of vision, the field of vision narrowing its dimensions, until, at the expiration of these five weeks, the vision of this eye was extinct, not the least perception of light remaining. During all of this period, she had no professional advice, and no other treatment than frequent bathing of the forehead and left temple with an infusion of hops. Up to this time, she has had in this left eye, and around it, pain varying in amount, but never remitting for a longer period than thirty-six hours. For three or four weeks past, she has had frequent momentary flashing, luminous spectra.

Three weeks after the extinction of sight in her left eye, she resumed partially her occupation as a seamstress, on dark clothes, and gradually increasing it, continued her work by day, and sometimes by night, until Oct. 14th, 1861. On this day, having been exposed

* Translated and published by the New Sydenham Society, 1859.

during the evening to unusually bright lights and fire, she felt, on going to bed, a sharp pain and smarting in the globe and brow of the right eye. On the following morning the pain had become intense, and vision very much affected, but whether by a general obscuration or a diminished extent of the field of vision, she cannot now say, by reason of the great intolerance of light which coexisted.

Twenty-four hours after the commencement of this attack, leeches were applied to the right temple, with great relief to the pain, but no improvement of vision. Under medical advice, still further relief was experienced from sinapisms and leeches, and a reduced diet and cathartic pills. Notwithstanding the relief from pain, vision rapidly declined during the six days following the attack.

Since this time, there has been a steady deterioration of sight, with more or less pain daily in the globe, but chiefly in the brow and left temple. These pains often extended through the right side of the head so severely at times as to be intolerable. For two weeks past, luminous spectra before this eye also. Now, there is in both eyes a continuance of the above-named symptoms.

The objective symptoms in the two eyes are almost precisely alike. The globe is hard and unyielding, the surface of the cornea somewhat but not wholly destitute of sensibility, the pupils largely dilated, the irides absolutely immobile, the aqueous humor sufficiently turbid to prevent any satisfactory ophthalmoscopic examination, but not so much as to prevent the opening of the pupils, presenting the peculiar diagnostic glaucomatous green coloring. The anterior chamber in the left eye is somewhat flattened. Not only are there no enlarged choroidal vessels visible, but in both eyes the sclerotic is, as compared with healthy eyes, unusually free from vascularity. For three days past vision has been absolutely extinct in the right eye, there being no perception whatever of the strongest light in either eye.

During three weeks past, Miss P. has been, under my direction, taking, every second night, pil. hydrarg., gr. v.; pulv. aloes, gr. i. M.; ft. pilulæ; kept open behind the right ear a small blister, and used many times daily as a bath around the orbits an infusion of pulv. opii gr. x. to water ʒ v. Under the use of these means, together with abstinence from meat and constant seclusion from offensive light, some mitigation of the pain and photophobia has been experienced in both eyes, but chiefly in the right. The sudden extinction of vision, however, in the right for the last three days—she having, on my first seeing her, had a constant appreciation of the passing of objects between her and the light, and occasionally a perception of large objects, as a hand or book—induces me to suggest to her the operation of iridectomy as offering the possibility of some improvement of vision in the right eye, and a probability of relief from suffering in both.

Under the influence of ether, and with the assistance of Messrs.

Bundy, Mackie, Webber, Treadwell and Mitchell, the operation was performed on both eyes on the side of the cornea towards the outer canthus, about one sixth or one fifth part of the iris being excised, and the aqueous humor largely evacuated from each eye.

Feb. 20th.—One month has passed since the operation. In the right eye, a very slight, and in the left a somewhat greater effusion of blood prevented, for some five days afterwards, any examination beyond the corneæ, there being, during that period, a slight sensation of tenderness in the globes, and some general injection of conjunctivæ, not demanding any change from the medication previously in use. As early as twenty-four hours after the operation, she expressed herself essentially relieved as to the severe pains in the globes, over the orbits and in the head.

One week after the operation, the blood in the chamber of the aqueous humor was nearly absorbed in the right, and partially in the left; the injection of conjunctivæ very much abated; the tenderness of the globes to the touch lessened, and the eyes and head vastly more comfortable than at any time for the last thirteen months.

Ten days ago, it being twenty days after the operation, she began, for the first time, to perceive light with her right eye. This perception becoming gradually stronger, she had, a few days later, occasional doubtful glimpses of objects in certain lights. For three or four days past, she sees at times with the right eye, in a very limited field of about eight inches diameter, objects of two or three inches diameter, such as small figures on a carpet and objects on a table.

By examination with the ophthalmoscope, in the left eye the general paleness of the field of the retina indicated an atrophied condition, and in the right eye there was an indistinct observation of the papilla of the optic nerve, very small trunks of the bloodvessels, and two dark patches on the left of the field of the retina.

This improvement can hardly be ascribed to any other influences than the relief afforded from intraocular pressure through the excision of the iris, inasmuch as the pil. hydrarg. and aloes were not given with the intention of any constitutional effect, and no evidence of any such effect has appeared. Since the operation, moreover, this pill has been taken but twice. Comparing, therefore, the past and present condition of the patient, we find, as the result of the iridectomy, less hardness of globes to touch, less turbidity of aqueous humor in both eyes, entire relief from pain previously frequent in the left, and almost constant in the right eye and side of head, and an improvement of vision in the right eye, which, though it is variable and leaves much to be desired, is sufficient to show that the performance of the same operation at an earlier period would probably have been the salvation of her sight.

DR. COALE'S ESSAY ON ANEURISM.

[Continued from Page 521, Vol. LXV.]

We have sought carefully for some statistics that would exhibit to us the precise value of the ligature as a cure for aneurism, and that would show us at the same time the causes of its failure where it was unsuccessful. These we have not been able to find. The only approximate to it that we have, we get from Lisfranc, who states that in 180 operations for aneurisms, he had 32 cases of hæmorrhage—1 in 6; occurring principally from the 16th to the 24th day. The number of deaths in these 180 was 43—1 in 4.

Of the 169 cases collated by this surgeon, the following is the result:—

	Fatal.	Cured.		Fatal.	Cured.
Aorta,	2		Primitive iliac,	3	1
Primitive carotid,	9	25	External iliac,	3	21
Subclavian,	17	18	Femoral,	8	38
Thyroid,		1	Tibial,	1	2
Brachial,	1	10	Peroneal,		1
Ulnar,		3	Doubtful,	4	

This exhibits, as will be seen, just one death in four cases.

Mr. Phillips gives a table quoted by Arnott in his Hunterian Oration for 1843, as follows:—

	Fatal.	Cured.		Fatal.	Cured.
Subclavian,	34	46	External iliac,	17	62
Carotid,	15	59	Femoral,	36	77
Humeral,	6	24	Various,	4	9
	55	129		57	148

In all, 389 cases with 112 deaths—1 to 2½ cures; a very large fatality, and one we cannot account for any more than we can for the singular disparity it displays between the fatality in tying the external iliac and that attending the same operation on the femoral.

Another of Mr. Phillips's tables gives us 171 cases of aneurism of the lower extremities, operated on after the "Hunterian Method"; 57 were unsuccessful—just 1 in 3—all of which except 2 died, *not of the disease, but of the operation.*

In the successful ones, secondary hæmorrhage occurred fifteen times.*

Norris, of Philadelphia,† gives a table of 177 cases—155 of popliteal and 22 of femoral aneurism—which exhibits as follows:—

Died from the effects of the operation,	38
Recovered after subsequent amputation,	6
" " suppuration of the sac,	10
" " after gangrene of the foot,	2
Total,	56

"So that nearly 1 out of 3 cases either terminated fatally or were maimed for the remainder of their lives."

* Quoted by Mr. Storks, in the London Lancet, May, 1846.
† American Journal of Medical Sciences, October, 1849.

Mr. Crisp, in his work already quoted, details 188 cases of operation for popliteal or femoral aneurism. Of these—

Died from effects of the operation,	35
Recovered after amputation,	11
" " sloughing of the sac,	2
" " gangrene of toes,	1
" " sloughing of integuments,	1
	50

More than 1 in 4 dying or being maimed.

Besides these exhibits, we find some few smaller tables, but none that serve to throw more light upon the subject. The fault of all is that they are too meagre in detail, and do not furnish us with any particulars which might greatly modify the aspect of the case. For the present, then, we must here rest our exposition of ligature applied above the sac as a cure for aneurism. We feel we have stated fairly its efficacy, and made a clear representation of the drawbacks to its use. Even with the latter, it claims our approval as a most valuable resort—when we cannot do better; and unless we can offer some remedy equally efficacious, which can be applied without the use of the knife, the ligature must be still our reliance in a vast majority of cases. We do not despair, however, of doing this. Galvano-puncture, we think, holds out strong promises. Manipulation has already effected much, and the surgical world are now looking with great interest to the next subject of our Essay—Compression.

Before concluding these remarks, we must refer to a pamphlet published in 1846 by Mr. Guthrie, "On wounds of the arteries of the human body, with the treatment and operations required for their cure." Much of it does not pertain directly to the matter in hand, but all of it is so largely luminous as to throw great light on the subject we have been treating. His views we have to some extent embodied in what we have said, but we wish we had space to transfer to our pages his "General Conclusions," arranged in twenty-seven aphorisms, and giving a most complete exposition of all the rules to be followed and precautions to be taken in applying the ligature to arteries, and also directions for combating the various mishaps that may occur during or subsequent to that operation.

Compression of the Artery.—We have already spoken of compression as applied to the aneurismal sac, and have shown that it effected cures. It was also practised upon the artery at an early period, but not apparently with encouraging success then. In later days it was advocated by Mr. Todd, about the year 1820, but being unable to get hold of his paper on the subject, we cannot state how far he reduced it to practice. Dr. Hutton, however, in 1842, treated a case of popliteal aneurism successfully at the Richmond Hospital, and to him we must give the credit for bringing to our notice what we cannot but consider one of the greatest improvements in modern surgery—a generally safe and efficient remedy for aneurism in which

the knife is wholly discarded, and the original disease combated without superadding to it the complication of a wound. The successful achievement of Dr. Hutton was at once hailed by his brother surgeons; and more particularly to those of Dublin—Crampton, O'. Ferrall, Bellingham, Cusac and Tuffnell—are we indebted for further efforts to establish this as one of the acknowledged resources of surgery. The last-named gentleman, in 1851, gave us, in a thin octavo,* a summary of the claims and achievements of compression up to that date. He had been preceded by some six years by Dr. Bellingham,† in a little pamphlet, but those six years had thrown much light upon the deficiencies as well as the excellencies of compression. Mr. Tuffnell gives us some remarks on these, which still hold good. He thinks that the ligature is by no means to be entirely discarded, but it still remains as a resort where the other fails. Compression, however, he considers "applicable to every ordinary circumscribed aneurism in an extremity where there is sufficient room for the application of the compressing apparatus at two different points above the tumor, premising, of course, that pressure on the trunk of the vessel completely controls pulsation in the sac, thus proving that no high bifurcation exists." He afterwards qualifies his demand for two points of compression by allowing he has seen cases "so frequently" cured by a single instrument in a short space of time, and yet "for prudence sake, as a general principle," he advocates using two points. The necessity of this will be shown presently. He does not advise compression in diffused and rapidly-extending aneurisms. These have no sac in which a coagulum can be formed; their only cure is the ligature. Nor does he advocate it where the tissues and organs around, particularly the veins, have become involved. In such a case amputation is the resource. The early want of success in using compression was undoubtedly from its not having been properly applied. Sufficient attention was not paid to the general condition of the patient, and the remedy was applied too violently and suddenly. This, later experiments have shown was entirely wrong. The compression need not be so severe as was at first supposed. It need not stop the circulation entirely in order to produce a cure. It seems to achieve what it does by the current through the sac being rendered less in bulk and less violent in its passage, so that the deposit of fibrine from it may take place more rapidly—sufficiently so, to plug up the orifice in a definite time. When first used, this was not understood. Strong pressure was exerted at once over a small surface, producing most excruciating suffering, and in many cases perfect intolerance of the remedy. Local inflammation, too, was set up, and the demands upon the general system were so great that the remedy became of itself a source of disease. In applying com-

* Practical Remarks on the treatment of aneurism by compression, with plates of the instruments hitherto employed in Dublin, and the recent improvements by elastic pressure. By Joliffe Tufnell, surgeon to the City of Dublin Hospital. 8vo. pp. 154. Dublin, 1851.

† Observations on the employment of compression in aneurism. By O. B. Bellingham. 8vo. pp. 14. Dublin. 1846. He reprinted this in 1847, in 12mo. pp. 180, much rewritten and enlarged upon.

pression, the patient should be first prepared for it by suitable general treatment. It is very desirable that all extra excitability should be removed, and that without reducing the system the chances of inflammation or of constitutional irritation should be lessened to the utmost. The mind and disposition of the invalid should also be prepared in order that he may be enabled to endure patiently the irksomeness of the remedy and its prolonged use if necessary.

With these precautions, the compression is applied at the most convenient and available point, which must be determined on in each individual case. We can only give, as general indications for the selection of the place, that a point at which the artery is superficial is better than one where it is deep-seated; where it has a resisting surface behind it, better than where it is bedded in soft tissues. We must, of course, have a favorable *point-d'appui* on the other side of the limb or trunk. This is readily furnished in the first, but in cases of aneurism on the trunk or neck we may have some difficulty to overcome—yet none that ingenuity has not surmounted. We may add, that in selecting this *point-d'appui* it should be as extensive as possible, so that the pressure may be distributed, and the suffering which would be caused by its being limited to a small surface be prevented.

In making compression the veins should be avoided, so that the returning circulation be not embarrassed. We should select, too, a point as near as practicable to the aneurism, so that the circulation in the collateral branches of the artery should not be interrupted.

The compression must be at first gentle, that the parts may become accustomed to it. At no time, in most cases, need it be very severe. This would induce excoriation and inflammation, and might necessitate us, for the time at least, to abandon the remedy. It would also cause pain, which in some cases has proved intense and utterly intolerable to the patient, and indeed has always furnished a great obstacle to the use of this remedy, and, with some, a plausible pretext for never adopting it.

In some few cases the results of compression have been very speedy, and a cure soon perfected. This cannot be considered the rule, and the surgeon must not only not expect too much himself, but he must prepare his patient for long endurance. He must not give him hope, which, long deferred, might sicken the heart and the body.

Absolute stoppage of the circulation, though desirable, is, as we have already suggested, not necessary. We should only aim at lessening the current to such a degree as will permit it to deposit fibrine more rapidly. This has been clearly shown in many instances, where cures have been effected by comparatively slight compression, the pulsation in the sac ceasing very gradually, and the tumor, *pari passu*, solidifying and lessening in size.

As for the instruments devised for effecting compression, they are already many in number, and we can scarcely make an absolute

choice of any one or two. And, in fact, we do not think it necessary we should do so. A mechanic always works best with the tools to which he is particularly accustomed. So we think an intelligent surgeon is always better off if left to the selection of the instruments with which he is to operate. The contrivances hitherto used for compression have effected this through three means:—the screw, a weight, and by springs. Each has done its work successfully.

The common tourniquet has served the purpose, but its compression of the whole circumference of the limb is an obvious and strong objection to it.

Manual, or, as we should rather call it, digital compression has been remarkably successful, and could fingers be applied night and day for the requisite time, with intelligence to govern them, we would have a perfect compressor. We have one case in which, no other means being at hand, a seven-pound weight was employed, and with comfort to the patient and complete success.

Dupuytren's compressor—an arc of steel, capable of being lengthened or shortened to suit, with a pad at each end of it—has furnished the type for several with similar intent. Dr. Carté has made a modification of this, replacing the unyielding stiffness of the arc by a spring, which has much increased the comfort of the patient, and consequently, as may be readily understood, the efficiency of the instrument. In another instrument—we do not know by whom devised—India-rubber straps are substituted for the steel springs, and are found to act very well—taking up less room, and not being so liable to derangement by the bed-clothes catching in them.

At St. George's Hospital (Dublin), a light and very manageable presse-artere, devised by a Mr. Blair, has lately been used. It is made much on the plan of the human hand. A broad part like the palm is applied to the outside of the thigh, and to this, attached by a sack and pinion, are pads taking the place of finger ends. On this principle several others have been made, each possessing some peculiar excellence. In London, one very similar, constructed by Mr. Bigg, who has shown great ingenuity in such things, is thus described by Mr. Cook:*—"a semicircle of steel with anterior and posterior movable arms, the anterior containing the screw and pad to rest on the artery, the posterior holding the hinged cushion or splint on which the limb is placed. When the instrument is applied, the pad is screwed down so as to *gently* compress the artery. The centre screw is then turned to direct the pad inwards and fix the artery between it and the bone. The lower screw, placed beneath the cushion, raises the outer edge of the splint and prevents its moving in the slightest degree. The advantages of this instrument seem to consist principally in giving the pad a direction inwards towards the bone, and in completely securing the limb by a good broad splint which may, by a screw placed beneath it, be brought in

* London Lancet, Jan. 8th, 1853.

closer contact with the thigh." This will give at least a general idea of these contrivances, and that is all we think necessary; for we feel that unless a surgeon is able himself to contrive and adapt such apparatus for so simple and plain a purpose, he would be otherwise utterly unfitted for taking charge of a case of treatment of aneurism by compression. He would be unable to modify and suit the pressure to the patient's feelings and to the necessity of the case. We may add that thus far American ingenuity has added nothing to our means for applying this remedy.

We have thus given the principles upon which compression should be applied, and sketched the mechanical means by which it is to be. We cannot do better than to quote Dr. Bellingham's concluding remarks to his little book, which, though published long since, was so comprehensive as to leave us but little to alter.

1. The arteries to which compression is applicable being far more frequently the subject of aneurism than those to which it is inapplicable, compression is calculated to supersede the ligature in the great majority of cases.

2. The cure of aneurism by compression upon the artery between the aneurismal sac and the heart, according to the rules laid down here, is accomplished by the gradual deposition of the fibrine of the blood in the sac, until both the latter and the artery at the part are completely filled. The process is, in fact, similar to that by which Nature effects a spontaneous cure of aneurism.

3. Such an amount of pressure as would cause inflammation and adhesion between the opposite sides of the artery at the point compressed, is never required.

4. The pressure should not be so great as to interrupt the circulation in the artery at the point compressed, an essential agent in the cure being that a current of blood should pass through the sac.

5. Compression by means of two or more instruments, one of which is alternately relaxed, is much more effectual than by any single instrument, and in many cases the pressure can be maintained by the patient himself.

6. The treatment of aneurism by compression does not involve the slightest risk to the patient, and, if persevered in, cannot fail of effecting a cure.

7. A cure of aneurism effected by compression, according to the rules laid down here, must necessarily be permanent; and in every case in which a cure has been accomplished, the patients have remained well subsequently.

8. The femoral artery remains pervious after the cure at the point at which the pressure had been applied, and no morbid change of any kind is to be detected in either the artery or vein at the site of the compression.

9. When a cure is effected by compression, the vessel is obliterated only at the seat of the aneurism, and the artery at this part is eventually converted into an impervious ligamentous band.

10. Compression effects the cure of aneurism by more simple and safer means than the ligature, while it is applicable to a number of cases in which the operation is contra-indicated or inadmissible.

11. Compression is not necessarily a more tedious or painful method of treating aneurism than the ligature, while it is much more certain, more likely to be permanent, and free from all danger.

12. Compression, according to the rules laid down here, has little analogy with the old method which went by this name; and in fact has no greater resemblance to it than the Hunterian operation had to the operation for aneurism which it superseded.

To this we add the following from Mr. Williams's admirable review of Miller and Fergusson's works on Surgery:—*

Recorded facts prove the following conclusions:—

* British and Foreign Medico-Chirurgical Review, January, 1853.

1. That in popliteal aneurism, skilful compression of the femoral is capable of curing the disease, and that with comparative and almost absolute safety to life and limb.
2. The time expended in the cure is on an average not greater than in the treatment by ligature.
3. That failure of compression does not compromise subsequent recourse to deligation; and that consequently when skilfully employed, being equally certain, far more safe, and not more tedious than ligature, it should in the great majority of cases be preferred. The only disadvantage of compression is the care and trouble necessary on the part of the attendant, with irksomeness and sometimes suffering on the part of the patient.

We will now look to the records of the doings of compression.

We find in the *Medical Times and Gazette* for Nov. 22d, 1856, a tabulated exposition of seventy-eight cases of aneurism, including all of that disease admitting of surgical treatment which have been under care during the previous four years in certain hospitals.

The summary of these is 78 cases—57 perfect recoveries; 2 unrelieved; 19 deaths.

The ligature cases were 43 in number. Deaths 19, as follows:—

1	Ligature of the	abdominal	aorta.
3	"	"	common carotid.
2	"	"	subclavian.
2	"	"	external iliac.
10	"	"	superficial femoral.
1	Death after amputation—no ligature applied.		
19			

All the operations on the aorta, the common carotid and the subclavian, six in number, were fatal. With the external iliac, 3 recovered, 2 died. With the popliteal, 23 recovered, 10 died. Thus much for ligature. Compression was tried in 54 cases, and was successful in 26:—

Subclavian	1*
Popliteal	24
Anterior tibial	1
Total	26

The failures were:—5 femoral, all that were tied; 22 popliteal out of 46; 1 radial; 1 posterior tibial.

As the compiler says, it must be taken into consideration that most of these cases were the first essays in compression of those who conducted the treatment, and allowance should be made accordingly. In spite of this, we must confess the show is a fair one of the capabilities of this system of treatment.

In the January number of the same Journal for 1860, is a continuation of the same investigations brought down three years later. This last paper includes all accessible cases, whether treated in British hospitals, or in those of the Colonies, or of the Army on foreign stations. The writer, Mr. Jonathan Hutchinson, seems to be as conscientious as he is diffident in his statements; and, instead of tabulating the results, he takes more trouble, and gives each case, so

* Though this should rather be called manipulation. We suppose it to be the case we have already given.

that it may be fairly examined and weighed on its own individual merits and peculiarities. He divides these cases into four groups:—

I. Compression successful.
II. Compression tried and abandoned.
III. Primary ligature.
IV. Other cases.

The first group contains 25 cases, as follows:—

Popliteal	23
Palmar arch	1
Brachial	1
Total	25

Of these, in one there was gangrene, amputation and recovery—scarcely a successful case of compression.

The cases where compression was tried and did not succeed, were as follows:—

Popliteal	10
Femoral	2
Radial	1
Total	13

Of these, there was death from pyæmia in 1; after amputation in 2; ligature had to be resorted to in 12. In one case the pulsation ceased in three days after the application of compression, but gangrene ensued. The limb was amputated, and the patient recovered. So that in no case was death induced by compression. It merely failed, and ligature had to be resorted to.

Where primary ligature was used, the cases were:—

	Whole number.	Death.	Recovery.
Carotid	3		3
Iliac	4	2	2
Subclavian	4	1	3
Femoral	7	1	6
Brachial	1		1
Temporal	1		1
Total	20	4	16

A more favorable exhibition than any other table displays for ligature.

Of these cures by compression, 1 was immediate; 2 were in one day; 2 were in two days; 2 were in four days; 1 was in six days. The longest period required was six months by one; also five, four, and three months each by one case. The average length of treatment thus deduced was just thirty-six days.

These returns, of course, cannot be considered final. They merely show what has been done thus far with a new and as yet imperfect method of treating aneurism. Are they not enough, however, to make us believe that the suggestion of this remedy is one of the greatest advances in modern surgery, and that every surgeon should feel bound, in every case coming under the rules and conditions we have quoted, to submit it carefully and hopefully to the effects of

compression, before resorting to what we should always make a last resort—the knife.

We conclude this chapter with quoting five "Indications for guidance in future cases," laid down by the painstaking and careful compiler whose labors we have just used.

I. To have two compresses in constant readiness from the first, and use them alternately.

II. To employ the pressure by preference over the brim of the pelvis, where the vein and artery lie side by side, and the latter may be compressed without the former.

III. To be very particular in removing all hair from the skin of the part, to dust it well with flour, and use every precaution to prevent excoriation. With this view it may be as well, as suggested by Mr. Paget, to harden the skin by the bi-chloride lotion for a few days before the beginning of the treatment.

IV. To load the patient's blood with fibrine by limiting the diet to solid food as much as possible. This should be attended to before beginning the treatment. The patient should be purged, allowed to eat freely of meat, but to drink only the least possible quantities. The drink allowed should be diuretic.

V. The aneurismal sac should be supported by the pressure of a soft pad or air cushion. If solidification be unduly slow, it may be justifiable to break up and disturb the coagula by forcible manipulation, in the hopes of thus affording irregular projections in which the deposit of fibrine would take place.

[To be continued.]

NEW "ANATOMICAL LAST."

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—Somebody has recently invented, and introduced into use, what he calls the "anatomical last." The last is made to correspond, as nearly as possible, with the shape of the foot; so that a boot made upon it will bear uniformly on the whole surface of the foot. Now, though this last may be "anatomical," it appears to me to be decidedly anti-physiological. It is said that the author of the invention is a physician; but how any one acquainted with the organization of the human foot, and understanding the design of its peculiar structure, could present such an article as an improvement, or of public utility, is more than I can see. Certainly he could have but little regard to his scientific reputation.

There are, I think, two important objections to this "anatomical last." First, the foot is a tripod, and so constructed as to form a double arch, composed of numerous bones, held in their place by powerful ligaments, upon which the superincumbent body rests as upon a spring or thorough-brace; thus preventing, as much as possible, all jar of the body in locomotion, and giving ease and elasticity to its movements. The design of this, when we consider the delicacy of many of the organs of the body, especially the brain, is too obvious to require further comment. Second, a large portion of the bloodvessels and nerves of the foot, which are peculiarly delicate and sensitive, are located within this arch, and are thus protected from the injury they would otherwise suffer from constant and severe pressure upon them. It is plain, then, that a boot so formed as

to fit accurately to the foot, and receive equally the weight of the body on its whole plantar surface, would counteract the design in this peculiar formation of this member, and must be both unphilosophical and anti-physiological. Had it been necessary, or better, for the foot to press equally on every part, would not the bottom of it have been made perfectly flat?

I should be very sorry, Messrs. Editors, to say anything to prevent any one—especially one of the profession—from turning an honest penny; but it appears to me that somebody must make a loss by the invention; for, if I mistake not, few will wish to purchase the second pair of boots made on the "anatomical last;" and, besides, as professed conservators of the public health, is it not our duty to caution against any fashion not in accordance with correct hygiene?

Sharon, March 4th, 1862. Truly yours, A. D. B.

DIURETICS.

[Communicated for the Boston Medical and Surgical Journal.]

Messrs. Editors,—I am inclined to think that too little importance has been attached to the use of the renal depurants in the treatment of many diseases; and the object of this article is to direct to them the attention of those who have been striving to drive disease out at the back door, without, in certain cases, opening the front one also. My attention was called to this matter, some three years ago, by reading the able work of Golding Bird on Urinary Deposits; a work which I would earnestly recommend to every physician who has not read it. Since then, I have used the acetate of potass with great benefit in many diseases which I had before treated without diuretics. It appears, from experiments made by Dr. Bird with the acetate of potass, that it increases the urine in quantity and quality. In one case, a young lady passed sixteen ounces of urine in twenty-four hours, containing 416 grains of solids; after three drachms of acetate of potass had been taken, in the course of twenty-four hours, she passed forty-six ounces of urine containing 782 grains of solids, with an excess of 72 grains of urea over the amount in the sixteen ounces of urine passed when no medicine was taken. It appeared to me, from this and other cases taken from the clinical report books of Dr. Bird, and his remarks in relation to blood depuration, that acetate of potass was of great use, and should be more extensively employed to remove morbid matter from the system. The urine contains a larger proportion of nitrogenized substances, the effete tissues, urea and soluble salts, when the acetate is taken, and in proportion to the amount of increase in the solids thrown off by the urine the blood is depurated. In all febrile affections, in biliary derangements, scrofulous affections, acute rheumatism, and in diarrhœa, I have found the acetate of signal benefit as a curative agent and adjuvant to other remedies. I was led to use it in diarrhœa, from

the fact that it increases the quantity of urine; and I thought that if I removed the watery portion of the blood by the urine, the balance between the alimentary canal and kidneys would be restored, on the principle of endosmose, and I have not been disappointed in the results; at least, patients recovered as soon, or even more rapidly under this treatment than under any other that I have employed. In gonorrhœa, also, I have found it useful, as it renders the urine alkaline, thereby stopping the scalding sensation caused by acid urine passing over the inflamed membrane; and as it increases the quantity of urine, I conceived that it thereby helps to wash out the disease.

I would not be understood as depending on this remedy alone in the diseases mentioned; but I think it belongs in the front rank, and I would invite those who do not use it, to give it a trial and then decide upon its merits. B. F. Taft.

Blackstone, Feb. 25th, 1862.

CASE OF RABIES.

By M. C. Hazen, M.D., Haddam, Ct.

[Communicated for the Boston Medical and Surgical Journal.]

On the morning of Friday, Dec. 27th, 1861, while I was away from home, word was left at my house for me to visit, as soon as possible, a son of Mr. J. S., who, the messenger said, was "having fits." About an hour later I received the message and visited the patient, finding him in the following condition.

He was lying on a cot-bed in the centre of the room, with three or four persons each side of the bed to attend him. As I opened the door, he fixed his wild black eyes upon me, made a low growl, showed his teeth, and sprang violently at me like an angry dog. On being restrained by the attendants, he would snap at them; first at one side, then the other, making the greatest effort to bite those who irritated him in the least. The eyes were wild and bloodshot; face red; skin in nearly a natural condition; no coating of the tongue, his parents informed me, as I was unable to get a look at it, and no increase in the frequency of the pulse. He seemed to be in a state of perfect unrest—tossing about, pulling the clothes to pieces with his fingers and teeth, and, on anything approaching near his mouth, snapping angrily at it. This irritable condition continued to increase until the whole system became engaged, and the body would be finally thrown into a condition of opisthotonos and emprosthotonos; and when seemingly the system was exhausted with these violent convulsions, he would throw the head back and finish with a howl exactly like that made by a dog. The particularly wild expression of the eye and whole countenance it is impossible to describe, and I am sure I never saw anything so frightful.

On inquiry, I learned from his parents that, eleven years ago,

when the boy was about three years old, while he was playing with a little dog belonging to a neighbor who was at his father's house, he accidentally stepped on the dog's foot, and he bit him on the left hand between the metacarpal bones of the little and ring fingers. The spot is marked by a cicatrix a quarter of an inch in length. The wound took on unhealthy action; the glands of the throat, &c., became much swollen, and he was in consequence made quite sick, and it was some time before the wound healed and the child was well.

Three years ago, after having been with his mother to a donation party, he had a slight convulsion and then showed some inclination to bite, but they all went to bed as usual, slept quietly, and he appeared well next day; so nothing more was thought of it. Nothing of the kind has since occurred, until the evening mentioned.

The first indications of anything wrong, was a violent chill, accompanied by a sense of fear, as if something dreadful was to happen to him. Soon he commenced to snap and try to bite his mother and those about him, and afterwards the convulsions, as before described, followed at intervals of a few minutes.

I stated to the father that I was afraid his son was suffering from hydrophobia; and if such was the case, my services would be of little avail, and the only consolation I could give was the assurance that death would very soon interfere to relieve him of such suffering. I prescribed the following:—℞. Morph. sulphat., gr. iv.; tinct. daturæ sem., ʒ iv.; aquæ, ʒ i. M. A teaspoonful once in half an hour until he sleeps. Directed them to confine his arms, to prevent his injuring his attendants.

28th.—Saw him at 9, A.M. He was sleeping when I went in, but soon awoke and looked wildly about. Since 3 o'clock has had short naps, and when awake has been less violent, but shows the same inclination to bite as before. Convulsions less frequent and violent. Pulse 120. Treats me civilly if I keep at a proper distance, but springs at me and tries to bite if I go too near. Continue medicine *pro re natâ.*

6, P.M.—Saw him again. He continues more quiet. Medicine to be continued.

29th, 11, A.M.—Dr. Charles Woodward, of Middletown, saw the patient with me. Convulsive movements less than yesterday; less inclination to bite. There is considerable febrile disturbance this morning. Tongue dry and covered with a brownish tenacious coat; breath very fœtid; talks incoherently. Pulse 130; great thirst; bowels have not moved since the attack. Continue the medicine as may be necessary, and give immediately fifteen grains of calomel; apply blisters to calves of legs. (His mother refused to apply blisters, but afterwards *one* was applied.)

3, P.M.—Condition much the same. Left two cathartic pills to be given at 9, P.M.

30th.—Appears better. Medicine operated on bowels. Tongue

more moist; is still very thirsty; is less unmanageable. Pulse 120. Loosed his hands.

31st.—Still improving. Pulse 100; tongue cleaning, and mind more clear; still he talks at random, and occasionally snaps at those about him. Continue medicine at greater intervals.

Jan. 1st.—Wished me a happy new year. He is rational most of the time. Pulse 88. Gave him a teaspoonful of the following, three times a day:—℞. Quiniæ sulphat., gr. xvi.; acid. sulph. arom., ʒ i.; aquæ puræ, ʒ ij. M. The other medicine *pro re natâ*.

2d.—Patient improving. No disposition to bite; no spasm, but at times looks wild and confused.

From this time he continued to improve, until now he appears in his usual health, though very nervous, and is attending school.

This would seem to be a case of madness caused by the bite of a dog—a proper name for it, perhaps, would be rabies, as hydrophobia would be a misnomer, for there was no dread of water, but he drank it freely. He was bitten by the dog eleven years before; the dog was not mad, but lived two years afterwards, and died in consequence of a fall which broke his neck. Animals, however, suffering from hydrophobia, frequently have no aversion to water, but drink it freely, and still die with every other symptom of this disease.

The time this poison remained in the system before manifesting itself in disease, was unusually long, though cases of hydrophobia have occurred even longer after they were bitten. In the adjoining town of Chester, years since, a man died of hydrophobia from the bite of a rabid dog; and this man, during his sickness, bit two persons who were attending him, both of whom died of well-marked hydrophobia, the last fifteen years after.

This horrible disease is fortunately rare, and if the foregoing case will throw any light upon diseases of this character, or be of interest to the medical profession, I shall need no apology for thus imperfectly reporting it in your JOURNAL.

March, 1862.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MARCH 13, 1862.

THE case of so-called rabies, printed above, presents so many remarkable features that one may well hesitate before accepting it as an unequivocal case of hydrophobia. In the first place, the dog that inflicted the bite to which the attack was attributed was not mad. Secondly, it is contrary to the recorded history of cases of hydrophobia that the patient should imitate the manner of a dog by growling and biting. Of the former symptom, the most that we find recorded is, that patients, in clearing the throat of the tenacious mucus which causes

them so much distress, sometimes give utterance to a sound which the vivid imagination of bystanders regards as resembling the bark of a dog. When demonstrations of violence are made, they do not usually take the form of biting. The period of incubation of the disease, if hydrophobia, was of extraordinary length, quite beyond that of any authentic record which we have seen. Nothing is said about inflammation of the scar of the original wound, which is a usual symptom in such cases.

"The most characteristic, indeed, the peculiar feature of the disease," says Elliotson, "that which is, perhaps, pathognomonic, is the effect produced on the diaphragm, and muscles of the throat, by the slightest draught of air, the smallest sudden drop of fluid, or even by the slightest sudden touch that may be made with the finger upon any part of the body. * * * The effect of cold air, &c., even that of a fly settling suddenly upon the skin, of a sudden strong light, the least agitation of the bed or bed-clothes, very much resembles that produced on us all, upon stepping into a cold bath. A sudden and involuntary inspiration is made, followed by several shorter ones; and in case of hydrophobia, the muscles of the throat are, at the same time, violently contracted, so that the glottis violently closes and the attempts of the diaphragm to descend, and of the muscles of the chest to elevate the ribs, are frustrated from moment to moment. The closure of the glottis, however, is not continuous, but alternates with relaxation of the muscles, so that a succession of sobs takes place. These convulsive actions of the muscles of the glottis, and indeed of the throat in general, are dreadfully violent."

None of these symptoms are recorded above.

On the whole, therefore, the case strikes us as quite an anomalous one, and hardly coming within the definition of ordinary rabies. It is certainly one of great interest, and may be regarded as an instance of a peculiar nervous and spasmodic affection, possibly attributable to the bite of a dog not affected with rabies.

HOSPITALS AND THE CITY HOSPITAL.—In continuation of our remarks in the last JOURNAL, we now propose examining a little more in detail the various publications we have mentioned, and criticizing more particularly the plan suggested in each for a City Hospital.

The pamphlet of Dr. Clark, as we have said, is rather a sketch than a filled out design, but it contains a great deal in the way of suggestion. In it the system of separate pavilions is advocated, and in accordance with this the plan offered by Dr. Clark consists in a square central building, in the rear of which four pavilions are arranged in a line down the long axis of the parallelogram. A large space is thus left in front and in the rear of the line of pavilions—while the central building, containing the various offices, reception room, &c., is conveniently near the street and of ready access from it. The pavilions, he proposes, should each be one hundred feet long by twenty-six broad, and only two stories high. Each story is to be divided into a ward for the accommodation of twenty patients, a nurse's room, bath room and three water closets. The pavilions most distant from the centre he proposes to devote, one to contagious diseases and consumption in those who are not paupers, and for the accommodation of persons during severe epidemics; the other to a lying-in and children's hospital. This certainly is a simple yet efficient arrangement, intended to occupy a lot 540 feet in length by 240 in breadth.

The Report of the Committee of the City Council enlarges upon this considerably, allotting to the Hospital the whole plot of ground contained between Harrison Avenue on the west side and Albany Street on the east, Concord Street on the north and Springfield Street on the south, giving a frontage on the former streets of about 452 feet, and on the latter of about 640—an ample space for every necessary condition for a good hospital of the size estimated to be required by a city the size of ours—including proper separation of the pavilions and

desirable isolation of the group of buildings from the dwellings or other erections around.

This report awards to Mr. Gridley J. F. Bryant the first prize for a design for the Hospital, and appended to it is the design, illustrated by a bird's-eye view block plan of the whole lot, with the buildings upon it, a general plan of the buildings, and plans in detail of various portions of the structures. The design may be described generally as presenting a central building, with pavilions connected with it by corridors. This central building is advanced towards Springfield St., the south boundary of the lot having two pavilions each on the east and west sides, placed symmetrically, and ranging east and west, and two in the rear, or towards the north side of the lot, ranging north and south. The other buildings on the lot are, porter's lodges at the entrance and a dead-house in the rear. The central building, while containing the necessary offices on the first floor and accommodations for a steward on the second, affords an operating theatre on the upper, under the dome by which it is surmounted. It is furnished with a "lift," by which patients lying upon a bed can be raised to the operating room without disturbance, and communicates with each pavilion by a corridor, close in winter, but, if desired, open in summer, and laid with a rail, on which patients can be moved on their beds without disturbing them or subjecting them to the slightest jar.

The pavilions exhibit a basement, the floor of which is slightly below the surface of the ground—furnishing a kitchen, dining-room, store-rooms, laundry, drying-rooms, &c.; next two floors of wards, with nurses' rooms, baths, water-closets, &c.—the lower affording a physician's room, the upper a private ward over it. The attic presents a trunk-room, store-room for clothing, and eight bed-rooms for domestics. On the whole, as far as it goes, we see but little to criticize in this plan, viewing it from the point from which it was conceived. We must ask, however, why the two rear pavilions range north and south, while the other four range east and west. In so important a matter as hygiene, mere æsthetics should not interfere; and if it is better that a ward should have an east and west frontage, so as to enjoy through the respective parts of the day the genial influence of the morning and afternoon sun, they should *all* be so arranged. If, however, a good south exposure is considered best, *all* should enjoy it. For our own part, we are decidedly in favor of the latter, for buildings like these—only one room in depth. In buildings like private houses, divided by a wall in the middle, so that the rooms each side of this face opposite points of the compass, we would prefer an east and west frontage, so that every room either side of the middle wall would receive through some part of the day the direct warming, cleansing and purifying effect of the sun's rays. But where there is no north room to be shut out entirely from this genial influence, we would rather have a full south exposure, so that every fair day we may have the sun sweeping in. It will be recollected that we can easily shut out more of this light than we want, but it is a hard thing to coax it in round a corner. With these views we would have the rear pavilions turned round so as to range east and west; and there is no reason why this should not be done, as there is plenty of room for such an arrangement. Excepting this, we consider this plan full, perfect and harmonious in its kind. We may have the same thing, lacking these excellencies, as is shown in the last alteration made in the design for a City Hospital by the city fathers themselves; and we may have, in our estimation, a much better kind or style of hospital.

We will first show how much worse a hospital may be made, by exhibiting the alteration made in the design just mentioned. These are given in "City Document No. 69," mentioned in our first article. It is the report of the Committee on the Free Hospital, and opens with a letter from Alderman Wilson, asking the opinion of the Consulting Physician of the city upon the "*radical alteration* in the plan adopted," made by the Committee on the Free City Hospital. This is responded to by Drs. Jeffries, Clark and Bigelow, and afterwards, we understand, by Dr. Hayward also, saying, after giving their reasons in detail under five different heads, that they "do not approve or recommend the change * * * very properly characterized as 'radical,' but respectfully advise a strict adherence to the original plan." The sole object of the alteration seems to have been to get

the front of the structure upon Harrison Avenue instead of upon one of the cross streets; and in doing this—the plot being a parallelogram, of which the sides are to each other as 9 to 13, the frontage being made upon a short side—a radical change had to be made of the relation of all the structures. In the new arrangement the central building is put into the middle of the lot and increased in size. For neither change can we see the least excuse. It was large enough already, in our estimate, for all the purposes for which it was designed or to which it ought to be put. Its greater distance from the street line makes it more inconvenient of access by foot passengers, and brings much unnecessary passing between the pavilions; besides which, its situation there and its relation to the four proposed pavilions, render unavailable ground which might be used for future enlargement of the hospital. The pavilions, too, are increased in size, but not in capacity—by enlarging the projections at each end, making the ground plan of the form of the letter I. This is done ostensibly for the purpose of giving additional accommodation for dining-room, nurse's room, &c. But after deliberately selecting a plan which met the approval of the Consulting Physicians of the city—which, after deliberation, mature enough, surely, if the time it took is any indication—was considered fully satisfactory in all these particulars, what new light has shown that the whole must be altered so thoroughly and "radically?" Then, at additional cost, a Mansard roof is to be put upon each pavilion, making it a story higher than was specified in the original proposals, which story is to be devoted—to what, of all uses?—a lying-in ward! Has ingenuity of misapplication ever gone further? Lastly, the want of economy in the distribution of the buildings is most patent. They are placed too near to each other to permit properly-sized and appointed ones to be interpolated, and too far from each other to allow of new ones beyond; in fact, they seem to be so sized and situated as to occupy the most ground with the least possible benefit—compatible with the show made.

This is our deliberate opinion, carefully weighed, of the alteration made in the design for the City Hospital. It probably does not concern a scientific Journal to go further in its commentary upon this matter, but we cannot help having our own opinion of the whole transaction, and seeing in it another repetition of a frequent occurrence. The city fathers set to work to attain a certain end; science and taste are consulted, opinions duly weighed, the whole measure most properly concocted and elaborated, and a decision arrived at that delights the fond public in the extreme; but, just at the point of its fulfilment, some adverse current sets in, all previous action is abandoned, and by some hocus-pocus, in defiance of the judgment of those who should know best, in opposition to all wholesome and legitimate opinion, another course is decided upon, and a total failure is the consequence. This seems to have been the history of the designs of the City Hospital; and such, we fear, is to be the result of the late action of the City Council.

In continuation, we propose a review of Dr. Green's book, in particular, and to make remarks in extenso on some other publications of a like nature, and upon Hospitals in general—according to our notion of them.

ANNUAL REPORTS OF THE MASSACHUSETTS GENERAL HOSPITAL AND THE McLEAN ASYLUM FOR THE INSANE.—The Trustees state that the expenses of the Hospital Department for the last year were $38,954.30; of the Asylum, after deducting receipts from farm account, $63,311.87; making the aggregate expenses $102,266.17. The income was—from board at Hospital, $5,347.27; at Asylum, $64,657.79; total for board, $70,005.06. Income from other sources, $25,991.38—making the whole income $95,996.44, or $6,269.73 less than the expenses. The deficiency of income the last year is shown more particularly in the matter of Free Beds, which, to accommodate 121 patients, cost $33,269.90; whereas the income from funds expressly for the support of these beds and from annual subscribers, was only $14,377.45—leaving a balance of $18,892.45 chargeable to the general fund. It appears that the Corporation are paying interest on a debt of about $50,000. The productive property of the Corporation is estimated at $622,059.91. The Resident Physician, Dr. B. S. Shaw, reports that the whole number of patients treated last year was 1552; of whom 268 paid their board; 32 paid part of the time; and 1252 were entirely free. Average number of patients, 140. The total number discharged was 1412; viz., well, 831; much relieved, 130; relieved, 188; deaths, 99; other causes, 164. Proportion of deaths to the whole number of results, 7 per cent. Number admitted on account of accidents, 297. The number of applicants refused—on account of contagious disease or incurability—was 262. The wards have not been full, and acute cases could have been received at any time. The Physician to Out-Patients, Dr. S. L. Abbot, reports the number of applicants for advice at the Hospital, 4775—viz., medical, 3219; surgical, 1556: Americans, 1798; foreigners, 2977. Number of prescriptions

given, 1368. In the McLean Asylum for the Insane there were 187 patients at the beginning of the year; admitted during the year, 111; discharged, 110; remaining at the end of the year, 188. Among the discharged, 54 were considered recovered; 6 much improved; 16 improved; 11 not improved; and 23 died. Dr. Tyler, the Superintendent, thinks the present war has not increased the number of admissions, nor operated unfavorably upon the sanity of the inmates, however it may have affected outside that of certain government contractors and other swindling operators.

ANNUAL COMMENCEMENTS.—At the Annual Commencement of the Cincinnati College of Medicine and Surgery, on the 12th ult., the degree of Doctor of Medicine was conferred on twenty-seven gentlemen in course; *ad eundem*, two; honorary, two. The number of matriculants the last season was 69.—At the twelfth Annual Commencement of the New York Medical College and Charity Hospital, held in Thirteenth street, on the evening of March 4th, the degree of M.D. was conferred upon eleven gentlemen.—There were twenty-one graduates at the Albany Medical College the last year—the lecture term ending in December. The number of Students was sixty-eight.—At the Annual Commencement of the Medical Department of the University of Buffalo, on the 25th ult., the Degree of Doctor in Medicine was conferred on twenty-eight members of the class. The charge to the graduates was delivered by Prof. James P. White.

The deaths in Philadelphia, the last year, amounted in number to 14,468—being about 1 in 39 of the population according to the census of 1860. The number of births was 17,271—including 162 twins and 6 triplets. Among the white children there were 745 more males than females; among the black, the females were most numerous.

In the Insane Department of the Philadelphia Almshouse, last year, the number of admissions was 415—which, with the 475 in the institution at the beginning of the year, make a total of 890 treated during the year. Of these, there were discharged, cured, 158; improved, 94; unimproved, 35. Deaths, 80. About 60 per cent were foreigners.

Dr. Lewis A Sayre, of Bellevue Hospital, New York, reports, in the *Medical Times*, one case in his own practice, also one under the care of Dr. Orasmus Smith, Physician to the Workhouse on Blackwell's Island, and refers to another by Dr. Bauer, of Brooklyn, in which delirium tremens was successfully treated by the use of the iced bath. The time of continuance in the bath was in one case nine minutes, in another ten and a half minutes; and the temperature of the water kept at 38 degrees by throwing in pieces of ice.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MARCH 8TH, 1862.

DEATHS.

	Males.	*Females*	*Total.*
Deaths during the week,	35	35	70
Average Mortality of the corresponding weeks of the ten years, 1851-1861,	37.1	41.6	78.7
Average corrected to increased population,	..	..	87.77
Deaths of persons above 90,	..	..	..

Mortality from Prevailing Diseases.

Phthisis.	Chol. Inf.	Croup.	Scar. Fev.	Pneumonia.	Variola.	Dysentery.	Typ. Fev.	Diphtheria.
14	0	3	5	2	0	0	1	2

METEOROLOGY.

From Observations taken at the Observatory of Harvard College.—For the week ending Feb. 22d.

Mean height of Barometer,	29.575	Highest point of Thermometer,	42.0
Highest point of Barometer,	30.020	Lowest point of Thermometer,	6 0
Lowest point of Barometer,	29.062	General direction of Wind,	W.N.W.
Mean Temperature,	23.2	Am't of Rain (inches), including melted snow,	2.81

TO CORRESPONDENTS.—A Report of a Case of Amputation at the Hip-joint, and a brief description of the Phacindoscope, have been received, and will have an early insertion. A note from Dr. B. will also be attended to.

BOOKS AND PAMPHLETS RECEIVED.—Comments on the Surgery of the War in Portugal, Spain, France and the Netherlands, &c. &c. By G. J Guthrie, F.R S. Sixth Edition. Philadelphia. J. B. Lippincott & Co. 1862.—Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S., &c. With three hundred and ninety-five Engravings on Wood. Philadelphia. Blanchard & Lea. 1862.—Dr. L. C. Lane's Introductory Address at the opening of the Course on Physiology in the Medical Department of the University of the Pacific, San Francisco.

DEATHS IN BOSTON for the week ending Saturday noon, March 8th, 70. Males, 35—Females, 35.—Accident, 2—apoplexy, 1—inflammation of the bowels, 1—congestion of the brain, 1—bronchitis, 4—cancer, 2—consumption, 14—convulsions, 1—croup, 3—debility, 1—diphtheria, 2—dropsy, 6—dropsy of the brain, 4—drowned, 1—epilepsy, 2—scarlet fever, 5—typhoid fever, 1—disease of the heart, 1—hernia (strangulated), 1—infantile diseases, 3—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 2—marasmus, 2—old age, 1—pleurisy, 2—sore throat, 1—unknown, 3.

Under 5 years of age, 30—between 5 and 20 years, 7—between 20 and 40 years, 13—between 40 and 60 years, 13—above 60 years, 7. Born in the United States, 46—Ireland, 17—other places, 7.